5/23/94

SITE ASSESSMENT

FOR ENVIRONMENTAL CONSTRUCTION, INC.
NITRO CRANE AND RIGGING PROJECT
F/K/A KING RIVER LIMITED

Mr. Tom Basso
On-Scene Coordinator
USEPA
77 West Jackson Blvd.
Chicago, Illinois, 60604-3590

Environmental Construction
INCORPORATED

1405 Newton Street · Tallmadge, Ohio 44278-3499
(216) 633-4435 · Facs # (216) 633-9719

May 23, 1994

Mr. Tom Basso
On-Scene Coordinator
USEPA
77 West Jackson Blvd.
HSE-5J
Chicago, Illinois, 60604-3590

RE: Site Assessment
Nitro Crane and Rigging
f/k/a King River Limited

Dear Mr. Basso,

The following is submitted in accordance with the Administrative Order by Consent signed into effect December 29, 1993, Section V, Pargraph 2, Sub-Paragraph C in matters pertaining to the site assessment of the Nitro Crane and Rigging Site (f/k/a King River Limited), New Boston, Ohio.

May 18, 1994 was the deadline under the terms found in the Adminstrative Order by Consent (AOC) for the completion of the site assessment of the Nitro Crane and Rigging site (f/k/a King River Limited). Environmental Construction fulfilled or exceeded all of the obligations of the assessment phase found in the AOC on or before the May 18, deadline.

In matters pertaining to the spill areas known as areas #3 and #4, Environmental Construction had to assess areas outside the fenced-in area of these spills in order identify the boundries of the PCB contaminated soils. An additional 300 samples have been taken in this expansion of these boundries and yet these boundries are still unidentified. Sampling continues in these areas until a perimeter of contamination can be established. (See attached drawings.)

In addition to soil sampling and analysis, assessment of the site also included wipe sampling on drums and dumpsters, water sampling, and assessment of vessels located in area #2 that required movement in order to expedite the soil removal phase. Information on these additional assessments are included in this report with a brief explanation.

Numerical data submitted represents only the statistical highlights, as the generated analytical results have reached a point where it would be counterproductive to include them with this report. All analytical data is on file at the Nitro Crane and Rigging (f/k/a King River Limited) site and available for review.

If any questions should arise, please feel free to contact Ron Spayde by phone or FAX at (614) 456-4102.

Sincerely,

Environmental Construction, Inc.
by Ronald Spayde, Project Manager

Attachments: Numerical data information for assessment drums and dumpsters
Numerical data information for water assessment
Numerical data on vessels in spill area #2
Numerical data on spill areas #2 ,#3, and #4 and accompanying charts

cc: Tom Buchan- OEPA
Sam Sirhan- Ecology and Environment- USEPA TAT
Bob Newman- Ohio Southland Development Group
Tim Walsh- Environmental Construction, Inc.

Numerical Data Information on Assessment of Drums and Dumpsters

An attempt by Environmental Construction to save some time and analytical costs by cleaning the drums and dumpsters before conducting wipe sampling on these containers failed to produce favorable results.

Drums and dumpsters both had any or all debris removed and debris was placed in the stockpile. They then recieved a triple wash/rinse cycle which included the use of a power washer with a jet tip and a diluted kerosene solution hand scrub.

After drying, these containers were sampled using the methods called for in the work plan.

In order to reduce costs, drums were divided into 5 lots and composite sampling was conducted on each lot.

None of the 5 lots of drums or 4 dumpsters achieved the cleanup level of 10 ug / 100 cm2 of less as required in the work plan.

Results are listed below. Further action is pending.

	Sampling Result
Dumpster #1	15 ug/100cm2
Dumpster #2	16 ug/100cm2
Dumpster #3	88 ug/100cm2
Dumpster #4	310 ug/100cm2
Drum lot #1	1300 ug/100cm2
Drum lot #2	4300 ug/100cm2
Drum lot #3	800 ug/100cm2
Drum lot #4	3000 ug/100cm2
Drum lot #5	290 ug/100cm2

Numerical Data Information on Water Sampling.

Water sampling was conducted in order to resolve some issues with gaining access to spill areas #2 and #3 and to identify other areas of contamination.

Filtering devices proved to be inconclusive as sampling matrix complexities provided added interference peaks after carbon filtering. 50 micron filters with a 5 micron backup also failed to give noticeable results.

Water filtering to evaporation pools will only be utilized as a last minute procedure used prior to entering a spill area that has standing water

Results are listed below. No further action pending.

Sample #ID	Results	Notes
WS #1	3.3 ug/L	Spill Area #2 before filtering
WS #2	3.1 ug/L	Spill Area #2 before filtering
WS #3	<3.0 ug/L	Spill Area #2 after filtering (inconclusive)
WS #4	<3.0 ug/L	Spill Area #2 after filtering (inconclusive)
WS #5	2.2 ug/L	Spill Area #3 before filtering
WS #6	1.6 ug/L	Spill Area #3 after filtering (inadequate)
WS #7	2.5 ug/L	Spill Area #1 Trench before filtering
WS #8	2.6 ug/L	Spill Area #1 Trench before filtering
WS #9	6.0 ug/L	Spill Area #1 Trench before filtering

Numerical Data Information on Vessels found in Spill Area #2

After analysis was completed on the soil samples in spill area #2, it was discovered that the areas of the highest contamination (16000 ppm) lay at the base of the concrete wall directly below three different vessels.

The vessels were inspected physically and then photograghed. They appear to be some kind of holding tank with a filtering device. The largest of the containers had a two inch direct feed line into top of the second largest vessel. The second vessel was full of a charcoal-like substance and had a discharge hose that fed directly back to the the spill area. The third vessel was a 55 gallon drum and was full of water.

The largest of the vessels was not sampled as it was deemed to dangerous to do so at its present location. This vessel was dry and no noticeable residue could be observed on the inside. If this vessel were to be entered, confined space entry procedures would have to be initiated, to include a mechanical retrieval device.

The second vessel was sampled for PCBs using soil sampling techniques.

The 55 gallon drum was sampled for PCBs using water sampling techniques.

Both the 55 gallon drum and the second vessel were found to exceed clearance level limits for PCB contamination and were subsequently placed in the soil stockpile area.

The largest vessel was also placed in the soil stockpile area pending further action.

Results from sampling are listed below. Further action is pending.

Sampling Results

Vessel #2	79 ppm
55 gal. drum	2000 ug/L

Spill Area Assessment-Numerical Data Sheet Spill area #2

Listed below is the numerical data highlights from Spill area #2. In order to have a better understanding of what this data implies, refer to the attached drawings corresponding with this spill area. Included in these drawings are the boundries of the excavation that will follow each assessed area.

Spill area #2

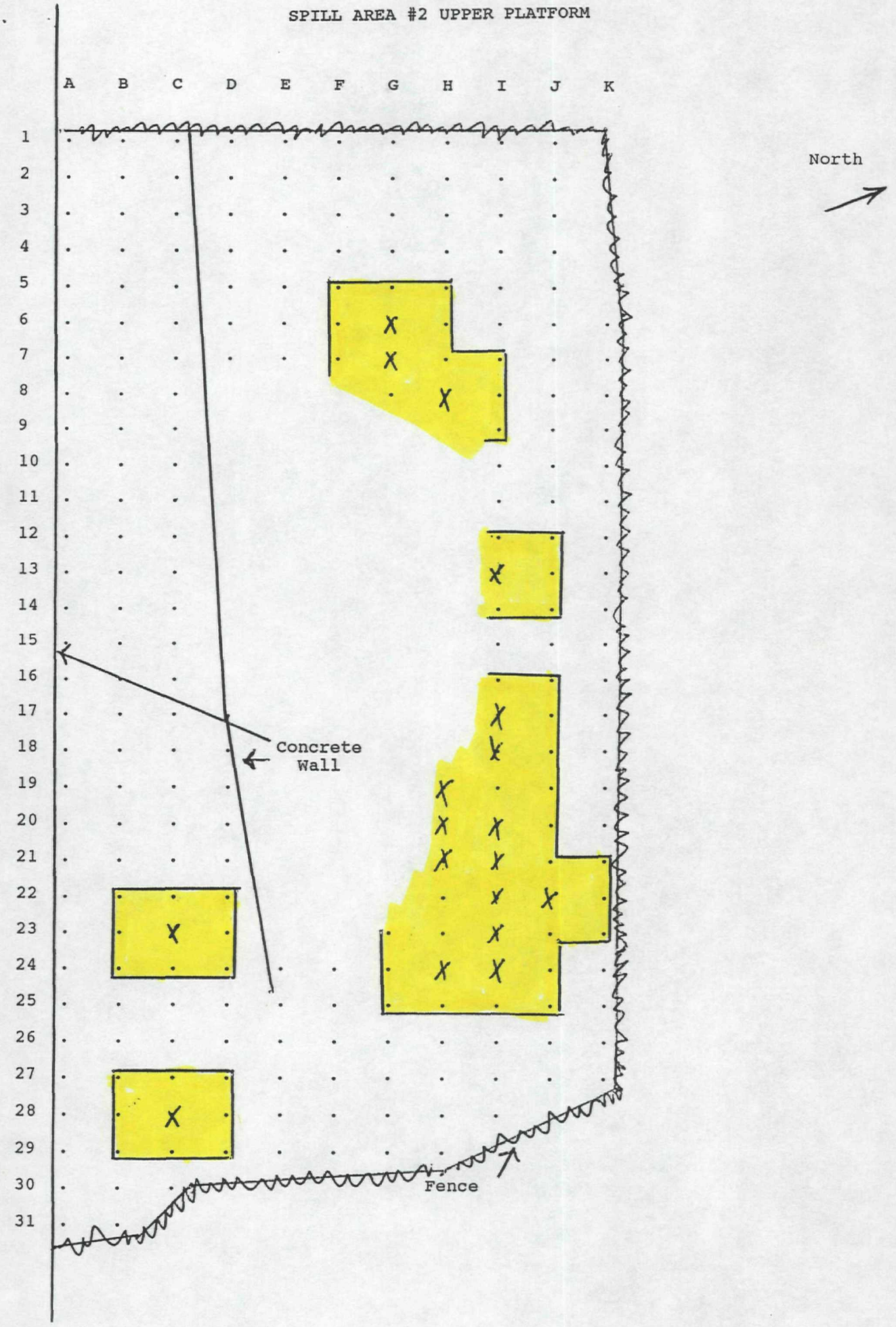
Spill area #2 assessment was accomplished by analyzing 5 surface planes; upper platform, the floor of the hole, and the south, west and north walls. Not assessed was the east wall area. The east wall area assessment was included with the upper platform sampling as this area was basically a slope which runs into the bottom of the spill.

Area	# of samples taken	# of samples over 25 ppm	location & number high sample 25 ppm+	location & number low sample 25 ppm+
Upper platform	214	18	C-23, 650 ppm	J-22, 26 ppm
South wall	29	3	DSWV-16, 16000 ppm	DSWV-15, 40 ppm
West wall	2	0	NA	NA
North Wall	24	1	INWV-16, 45 ppm	NA
Floor Area	45	34	F-H-16, 16000 ppm	E-H-13, 28 ppm
Totals	314	56		

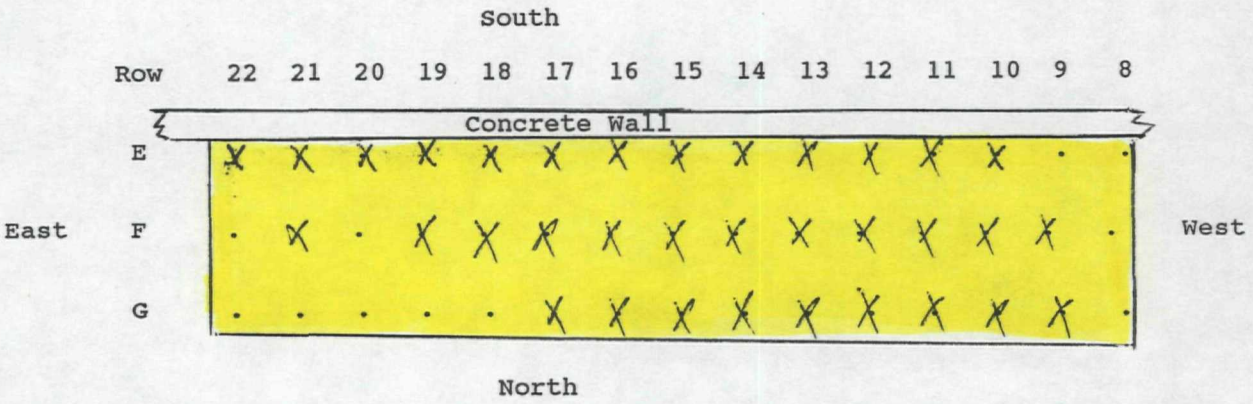
All spill area #2 samples found to be 25 ppm or greater can be found inside the fenced in area as designated in the AOC.

Excavation began in the upper platform area of spill #2 on May 9, 1994 and is being reassessed after the first excavation.

SPILL AREA #2 UPPER PLATFORM

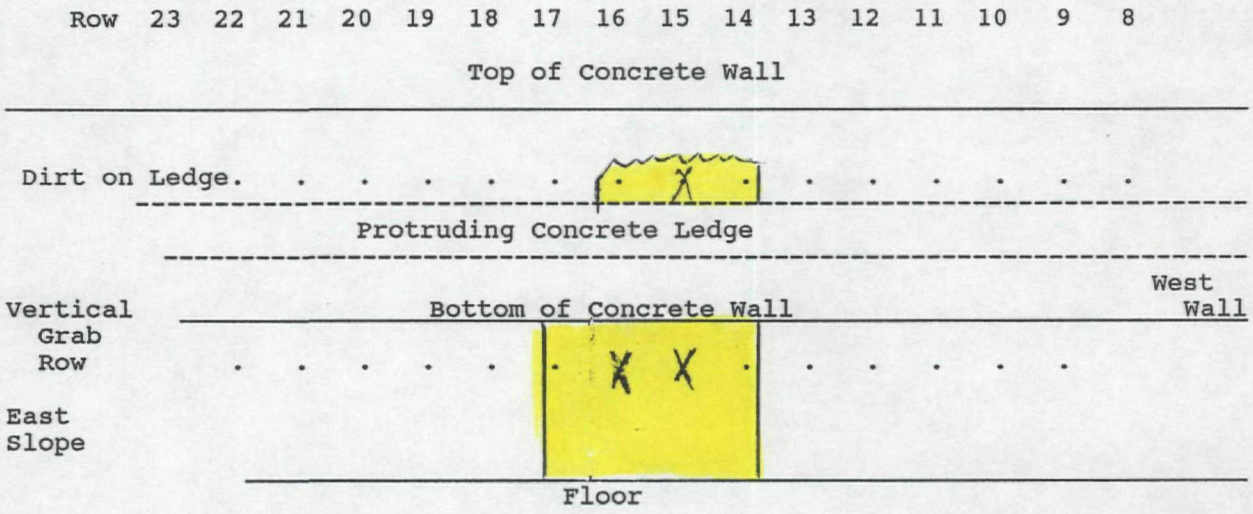


Floor Area of Spill #2



Floor area designators E-H-16 Row E, Hole, Sample #16

SOUTH WALL



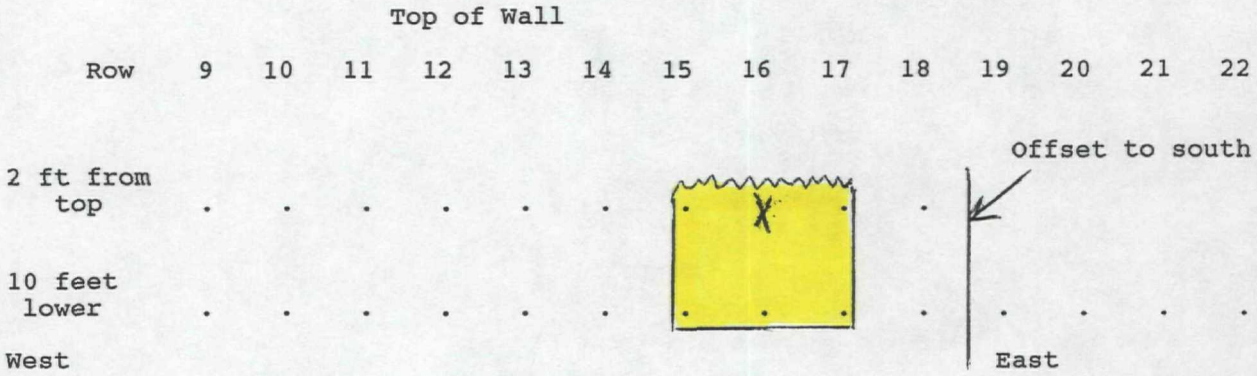
South Wall Designators as follows;

Dirt Ledge-- DSW 22	Row D, South Wall, Sample #22
Vertical Grab-- DSWV 22	Row D, South Wall, Vertical, Sample #22

Sample DSWV 16 was recorded at 16000 ppm and is located directly under the vertical eroded plane, under the concrete wall.

SPILL AREA #2

North Wall

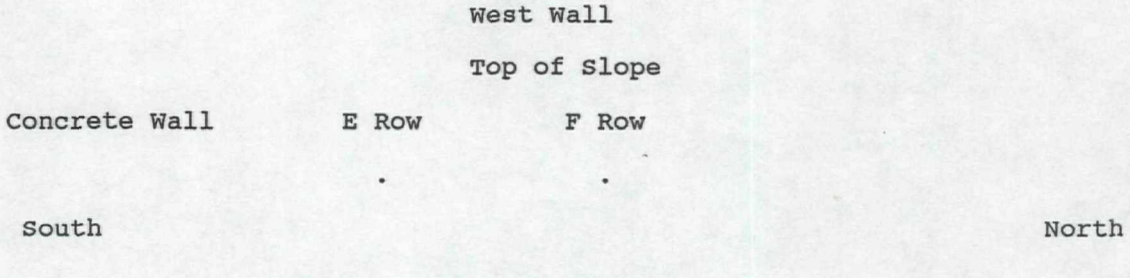


Floor of spill area

North Wall Designators

Top Row	INWV-9	Row I, North Wall, Vertical, Sample #9
Lower Row	HNWV-9	Row H, North Wall, Vertical, Sample #9

West Wall



West Wall - Two samples taken, recorded as EWWV-8 and FWWV-8, both <25ppm.

Spill Area Assessment-Numerical Data Sheet Spill area #3

Listed below is the numerical data highlights from Spill area #3. In order to have a better understanding of what this data implies, refer to the attached drawings corresponding with this spill area. Included in these drawings are the boundries of the excavation that will follow each assessed area.

Spill area #3

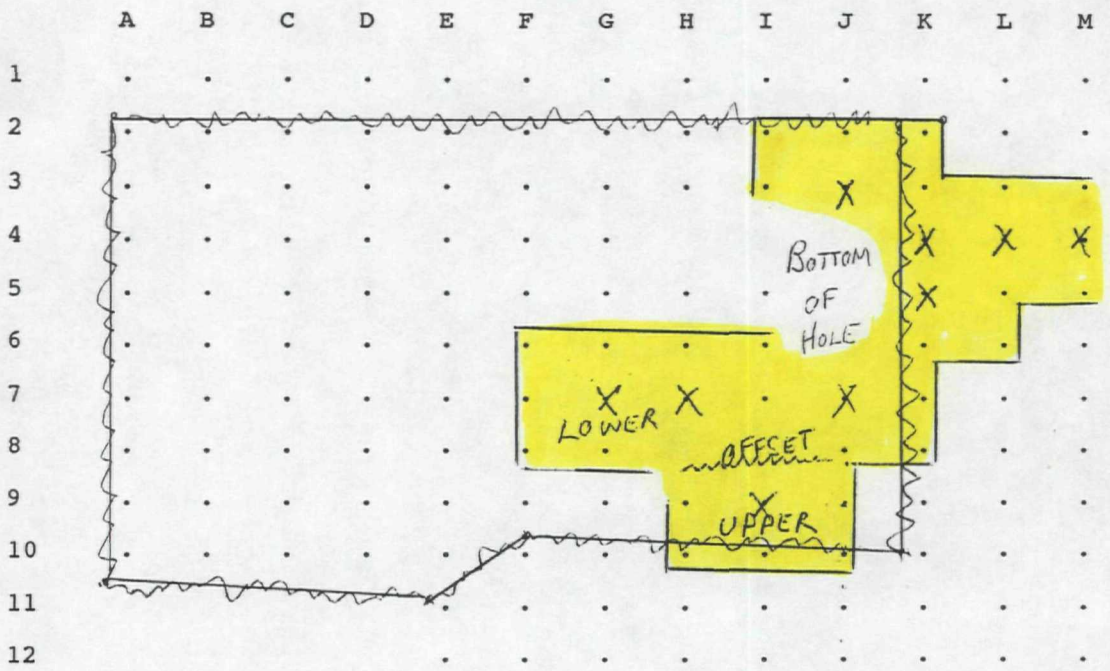
Spill area #3 assessment was accomplished by analyzing 5 surface planes; upper platform, the floor of the hole, and the south, west and east walls. Not assessed was the north wall area. The north wall area assessment was included with the upper platform sampling as this area was basically a slope which runs into the bottom of the spill.

Area	# of samples taken	# of samples over 25 ppm	location & number high sample 25 ppm+	location & number low sample 25 ppm+
Upper platform	141	9	K-5, 11000 ppm	J-7, 31 ppm
South wall	3	3	JSWV-2, 6600 ppm	JSWV-1, 4300 ppm
West wall	6	3	JWWV-1, 2900 ppm	JWWV-2, 39 ppm
East Wall	9	1	JV-3, 120 ppm	NA
Floor Area	4	0	NA	NA
Totals	163	16		

Contaminated samples as high as 6200 ppm can be found as low as 30 ft. below the rim of the excavated area.

Excavation has not started in this area as of yet, as a heavy hammer would have to be mobilized accomplish the necessary cleanup requirements. This hammer represents a tremendous cost increase and will be mobilized only after areas #2 & #4 are completely excavated or are in need of a hammering device. This machine would be used for full time operations only and will then be demobilized as a cost saving measure.

Spill Area #3 Upper Platform



East

North South

West

Floor of Spill Area #3

South

East JH1 JH2 West

IH1 IH2

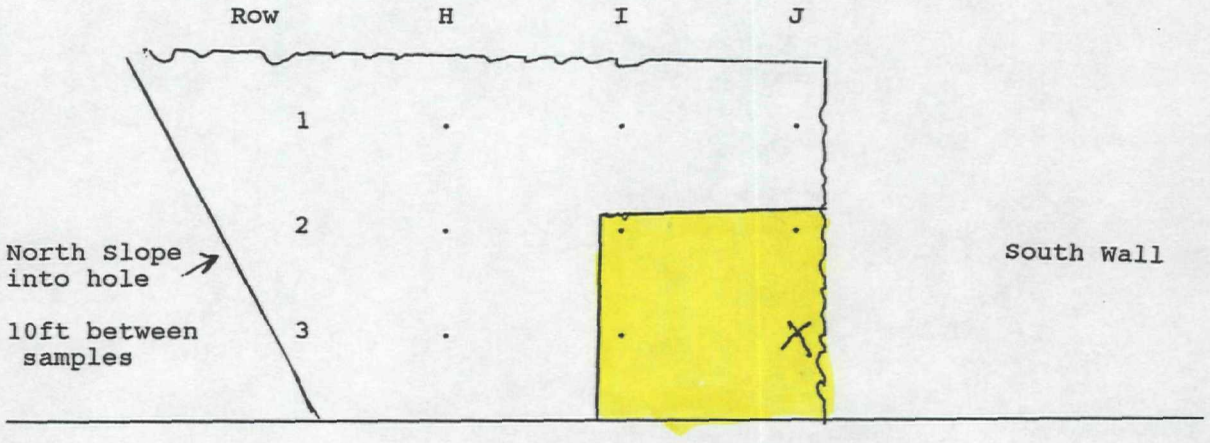
North Slope Into Hole

4 Samples were taken at the bottom of spill #3. All were less than 25ppm.

Spill Area #3

East wall

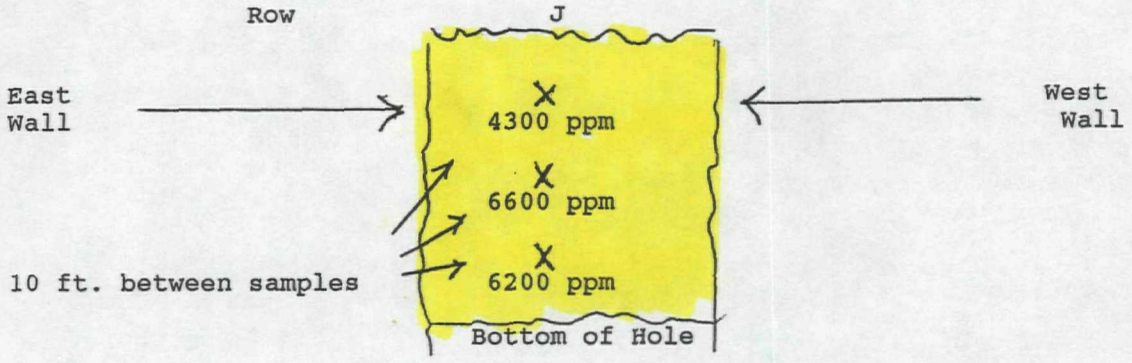
Top Ledge



Sample Designators HV1- Row H, Vertical Sample, #1

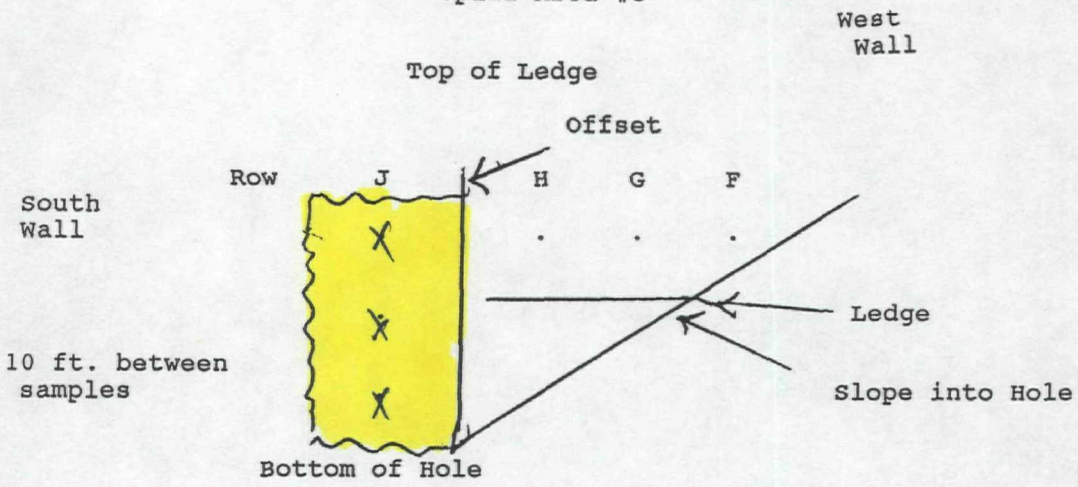
South Wall

Top of Ledge



Sample Designators JSWV1- Row J, South Wall, Vertical Sample #1

Spill Area #3



Sample Designators JWWV1- Row J, West Wall, Vertical Sample #1
HV8- Rows H,G,F Vertical Samples, Cross Row #8

Spill Area Assessment-Numerical Data Sheet Spill area #2

Listed below is the numerical data highlights from Spill area #2. In order to have a better understanding of what this data implies, refer to the attached drawings corresponding with this spill area. Included in these drawings are the boundries of the excavation that will follow each assessed area.

Spill area #2

Spill area #2 assessment was accomplished by analyzing 5 surface planes; upper platform, the floor of the hole, and the south, west and north walls. Not assessed was the east wall area. The east wall area assessment was included with the upper platform sampling as this area was basically a slope which runs into the bottom of the spill.

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Floor Area	45	34	F-H-16, 16000 ppm	E-H-13, 28 ppm
Totals	314	56		

All spill area #2 samples found to be 25 ppm or greater can be found inside the fenced in area as designated in the AOC.

Excavation began in the upper platform area of spill #2 on May 9, 1994 and is being reassessed after the first excavation.

Spill Area Assessment-Numerical Data Sheet Spill area #4

Listed below is the numerical data highlights from Spill area #4. In order to have a better understanding of what this data implies, refer to the attached drawings corresponding with this spill area. Included in these drawings are the boundries of the excavation that will follow each assessed area.

Spill area #4

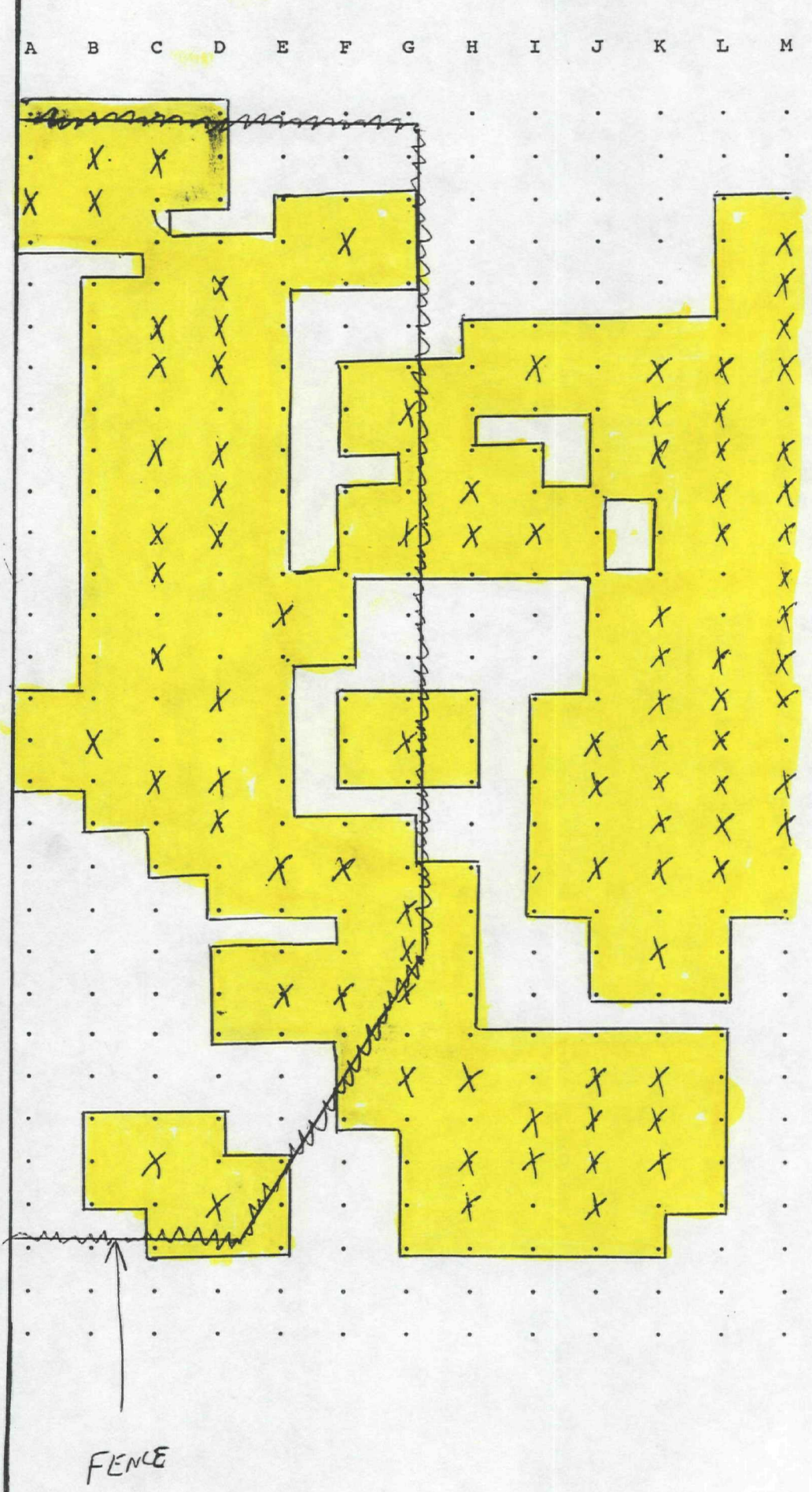
Spill area #4 assessment was accomplished by analyzing one surface plane. Samples were first taken inside the fenced in area as designated in the AOC. Results of this sampling proved to be incomplete in fixing a northern and eastern boundry of the spill, and futher sampling ensued. Maps included in this report are complete up thru May 18, 1994. Further sampling has been conducted since then, with the results pending. Further sampling was conducted in 20 ft. grids instead of the standard 10 ft. grids as was done previously. The 20 ft. grid system was established mainly as a cost saving measure after verbal permission was given by the USEPA. This system will also help accelerate the process required in identifying the parameters of the contaminated spill area.

Area	# of samples taken	# of samples over 25 ppm	location & number high sample 25 ppm+		location & number low sample 25 ppm+	
Inside fence	171	34	B-2,	3000 ppm	E-13,G-8,	25ppm
Outside fence	219	56	H-24	1700 ppm	J-19,M-18	26ppm
Totals	390	90				

During the course of assessment, it was discovered that more than one Arochlor was present on site other than Arochlor 1260. Several samples were recorded as having 1254 Arochlor, with 2 of the samples being recorded as being greater than 25 ppm.

Excavation began inside in fenced-in area of spill #4 on May 11, and excavation continues as of this date.

SPILL AREA #4


A B C D E F G H I J K L M
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
NORTH
FENCE